Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



A292.9 So3W2

WATER SUPPLY OUTLOOK FOR UTAH





U. S. DEPARTMENT of AGRICULTURE * SOIL CONSERVATION SERVICE

Collaborating with

UTAH STATE DEPARTMENT OF NATURAL RESOURCES -- DIVISION OF WATER RIGHTS

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

APR. 1, 1974

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder af the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course meosurement is obtained by sampling snow depth and water equivalent of surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in mast states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automotic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snaw water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reparts. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and sail moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Snow Surveyors near Ship Creek, Alaska snow course.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in coaperation with stote water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bazeman, Mantana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utoh	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokone, Woshington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and tor British Columbia by the Deportment of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

3

WATER SUPPLY OUTLOOK FOR UTAH

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

A. W. HAMELSTROM

STATE CONSERVATIONIST SOIL CONSERVATION SERVICE SALT LAKE CITY, UTAH

In Cooperation with

DEE C. HANSEN

STATE ENGINEER
DIVISION OF WATER RIGHTS
UTAH STATE DEPT. OF NATURAL RESOURCES

Report prepared by

BOB L. WHALEY, Snow Survey Supervisor

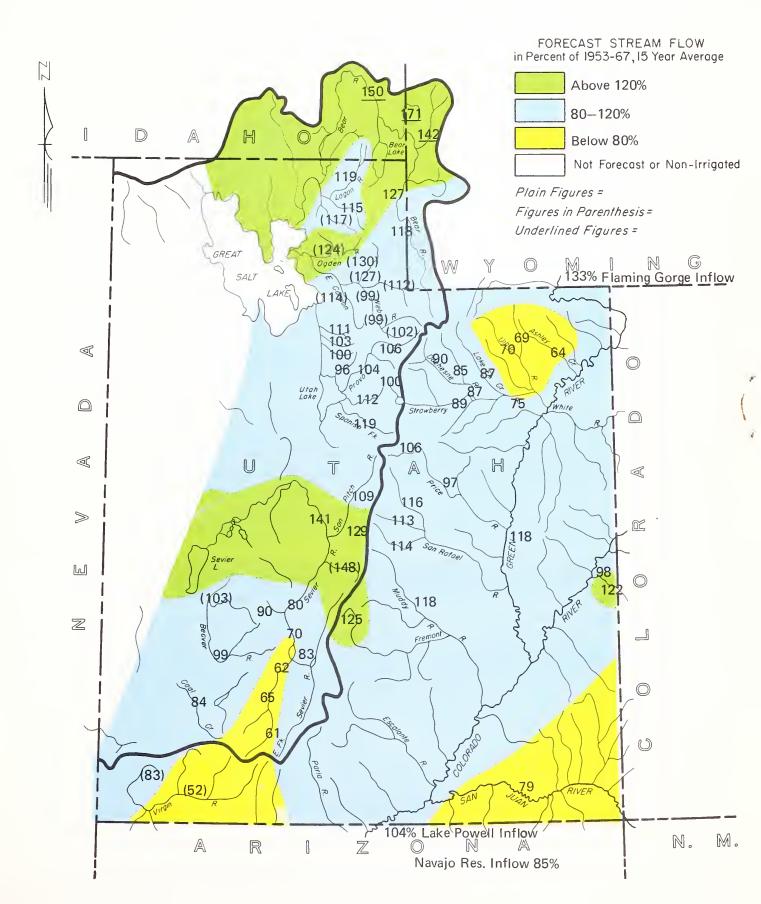
SOIL CONSERVATION SERVICE SNOW SURVEY SECTION FEDERAL BLDG., ROOM 4012 SALT LAKE CITY, UTAH 84138



PROSPECTIVE WATER SUPPLIES

Based on Snow Surveys Made on UTAH and BEAR RIVER WATERSHEDS







as of A**pril 1, 1**974

SNOW COVER

Snow cover now ranges from 54% of average on Ashley Creek to 144% on Salina Creek. Most snow courses again received less than average increases in water content and many showed much above average melt due to a dry, warm March.

PRECIPITATION

Mountain precipitation stations showed well below average catch during March except on the Lower Bear Watershed and one station in the Ogden Basin.

SOIL MOISTURE

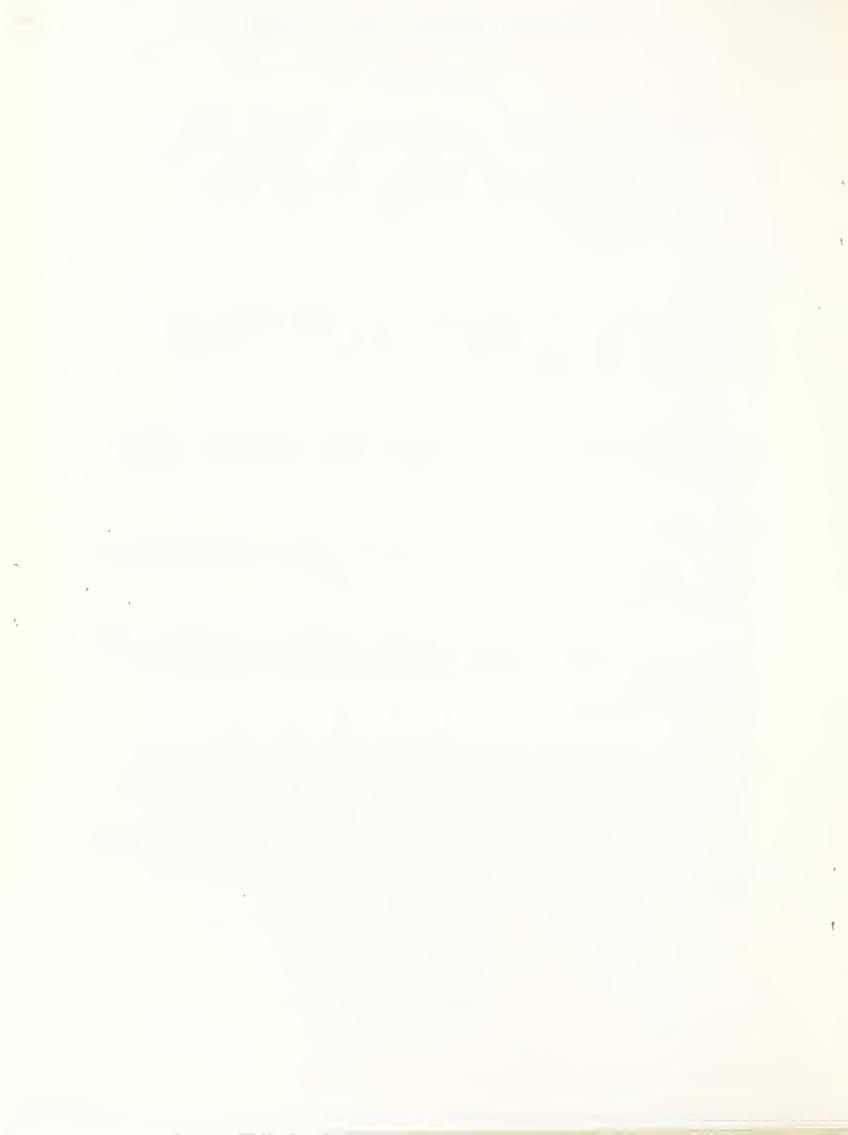
Watershed soils are generally near average moisture at higher elevations but are beginning to dry out below the snow line.

RESERVOIR STORAGE

Storage in 24 reservoirs (excluding Colorado project reservoirs) is 132% of the April 1 average for the 1958-72 15 year period and about 85% of usable capacity.

STREAMFLOW FORECASTS

Forecasts of spring and summer streamflow ranges from 52% of average on the Virgin River to 171% of average on Thomas Fork of the Lower Bear River. The Sevier at Hatch is now forecast at 61% of average and other areas expecting less than average are in Uintah Basin, Coal Creek, Beaver River, and all of the Upper Sevier. These areas are expected to have some water supply shortages late in the season unless above average precipitation occurs during the runoff season. All other areas are expected to have adequate or better water supplies.

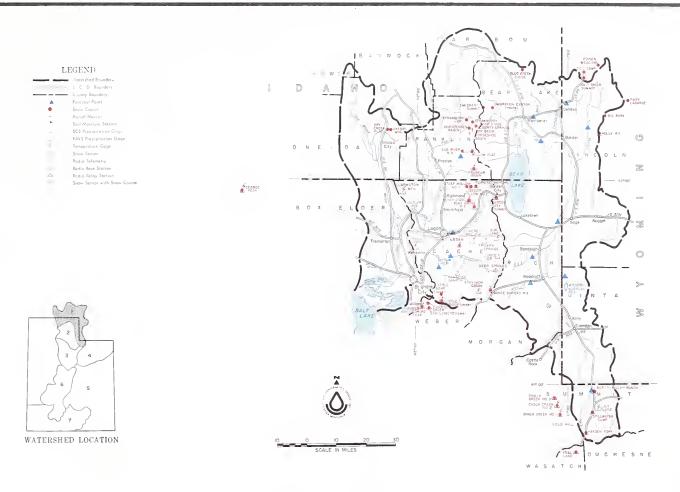


HOGELAND, OREG 1871 M7-0-22027-1-

WATER SUPPLY OUTLOOK

BEAR RIVER BASIN in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



APRIL 1, 1974

THE WATER SUPPLY OUTLOOK IS AVERAGE TO ABOVE AVERAGE

SNOW COVER ranges from 110% of average on the Upper Bear to 117% on the Logan River.

PRECIPITATION at mountain stations ranged from 56% to 167% of average from South to North in the basin.

SOIL MOISTURE is near average.

RESERVOIR STORAGE is 112% of average and 3% better than last April 1.

STREAMFLOW FORECASTS range from 112% of the April-July average on the Bear at Utah-Wyoming State Line to 171% of average on Thomas Fork. The Bear at Harer, Idaho is forecast 150% of the April-September average and Logan River is 119% of the April-July average. All water users in the area are expected to have adequate or better water supplies this season.

STREAMFLOW FORECASTS		THIS YEA	R	PAST	RECORO	SUMMARY OF SHOW MEASUREMENTS			
BASIN, STREAM and/or FORECAST POINT	Thousand Acra Feel	Percent of Average	FORECAST PERIOD	THOUSANO .	ACRE FEET Average +	RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR AS	A PERCENT OF
EAR RIVER						UPPER BEAR RIVER	11	130	110
Bear at Harer, Idaho ¹ Bear nr Randolph Bear nr Ut-Wyo. State Line	406 130 125	127	Apr-Sept Apr-July Apr-July	133 104	271 102 112	LOGAN RIVER	19 6	116 150	118
Bear nr Woodruff Big Crk nr Randolph, Utah Blacksmith Fork nr Hyrum	153 7.0 55	118 167	Apr-July Apr-July Apr-July	149 	130 4.2b 48		-		
Little Bear nr Paradise Logan nr Logan ¹ Smith's Fork nr Border, Wyo.	40 135 165	119	Apr-June Apr-July Apr-Sept	44 90 88	34 113 116				
Thomas Fork nr Ut-Wyo Border Woodruff Crk nr Woodruff, Ut	55 18.5		Apr-Sept Apr-July	30	32 15.4				
1 01 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				3 14					
<pre>1 - Observed flow corrected fo b - Average of all past record</pre>				a diver	sions				
SERVOIR STORAGE (Thousand Acre Feet) MID-MO	NTH READING		•		•	PEAK FLOWS	1	r	

	0555011010	Usable		Usable Storage		
Basin or Stream	RESERVOIR	Capacity	This Year	Last Year	Average†	FORECAST POINT
EAR RIVER	Bear Lake	1421.0	1097.3	1064.4	976.4	Big Creek nr Randolph
	Woodruff Narrows	26.5	21.5	26.5	24.5	Little Bear nr Paradise
						Logan River near Logan
ITTLE BEAR	Hyrum	15.3	11.1	10.6	12.9	Woodruff Creek nr Woodruff
	Porcupine	11.3	7.3	4.1	4.9	

+ - 1958-72 15 year average period

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE Federal Bldg. - Raom 4012 Salt Lake City, Utah 84138

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE AGR-101



Forecast Range 50-90

400-550

1100-1300

200-380

41ь

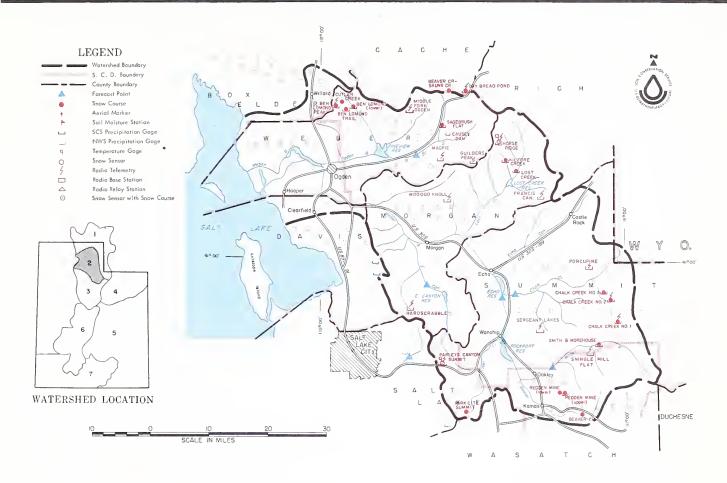
473

984

240

WEBER-OGDEN WATERSHEDS in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



APRIL 1, 1974

THE WATER SUPPLY OUTLOOK IS NEAR AVERAGE

SNOW COVER receded during a dry March and is now 100% of the April 1 average on the Weber and 101% on the Ogden.

PRECIPITATION at mountain locations ranged from 62% of average on Lost Creek to 119% on the North Fork Ogden during March.

SOIL MOISTURE is average or better after most March snow melt soaked into the soils.

RESERVOIR STORAGE is 149% of average on the Ogden and 131% on the Weber River.

STREAMFLOW FORECASTS were reduced by a dry month and now range from 99% of average for the Weber at Coalville to 130% of average on the South Fork Ogden. Water users in this area can expect average water supplies from direct flow diversions to better than average from reservoir storage.

TREAMFLOW FORECASTS		THIS YEA	R	PAST	RECORO	SUMMARY of SNOW MEASUREMENTS			
BASIN, STREAM and/or FORECAST POINT	FORE Thousand Acre Feel	Percent of Average	FORECAST PERIOD	THOUSAND /	ACRE FEET Average †	RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR AS A	PERCENT OF
EBER-OGDEN RIVERS	300740					OGDEN RIVER	6	63	101
Chalk Crk at Coalville East Canyon Crk nr Morgan ¹ Hardscrabble Crk nr Portervill Lost Crk nr Croydon, Utah Pineview Reservoir Inflow ² South Fork Ogden nr Huntsville Rockport Reservoir Inflow ¹ Weber nr Coalville ¹ Weber nr Oakley	17.0 127	112 114 111 127 124 130 99 99	Apr-June Apr-June Apr-June Apr-June Apr-June Apr-June Apr-June Apr-June Apr-June	34 16.5 105	32 22 14.4b 13.7 102 50 110 111 100	WEBER RIVER	11	95	100
1 - Observed flow corrected for 2 - Inflow record as computed b - Average of all past record	by U. S	. Bure	au of Rec						

		Usable	Usable Storage						
Basin of Stream	RESERVOIR	Capacity	This Year	Lest Year	Average				
OGDEN .	Causey	6.9	0.5	2.8	2.8				
	Pineview	110.1	70.2	35.9	44.7				
WEBER	East Canyon	48.1	41.1	39.6	21.0				
	Echo	73.9	51.6	43.2	45.7				
	Lost Creek	20.0	14.0	15.7	12.0				
	Rockport	60.9	53.2	25.3	27.1				
	Willard Bay	193.3	158.7	167.6	136.5				

PEAK FLOWS

210~350	Average 206b
210~350	206b
650-1000	697
350-650	373
	350-650

+ - 1958-72 15 year average period

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE Federal Bldg. – Room 4012 Salt Lake City, Utah 84138

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

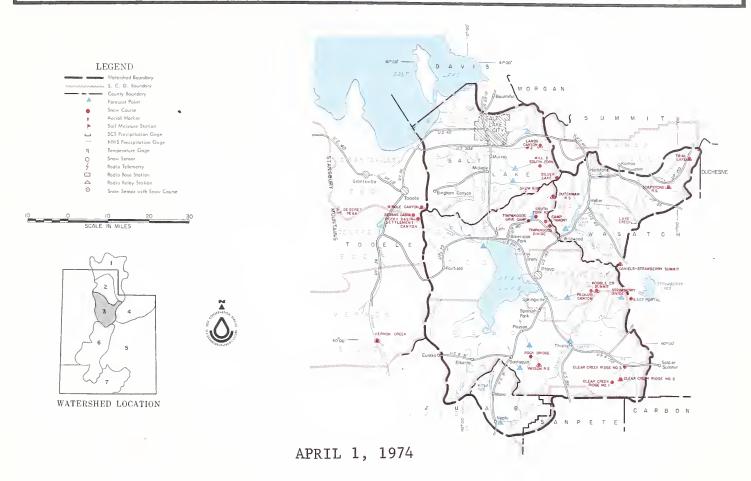


POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE



UTAH LAKE, JORDAN RIVER and TOOELE VALLEY WATERSHEDS in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



THE WATER SUPPLY OUTLOOK IS NEAR AVERAGE

SNOW COVER has dropped to 85% of average on Utah Lake watersheds, 103% on watersheds above Salt Lake and 104% on Tooele Valley watersheds. Snow courses received much less than average March increases and many lost water content.

PRECIPITATION at mountain stations ranged from 36% of the March average on Spanish Fork and Hobble Creek to 86% in Middle Canyon above Tooele.

SOIL MOISTURE is near average at higher elevations but drying out below the snow line.

RESERVOIR STORAGE is well above average.

STREAMFLOW FORECASTS dropped due to a dry March and now range from 71% of average on Vernon Creek to 119% on Spanish Fork. Strawberry Inflow is now expected to be average (100%) and Provo near Hailstone 106% and 104% below Deer Creek Dam. Forecasts on streams above Salt Lake range from 100% for Little Cottonwood to 111% for Parley's Creek. Settlement Canyon Creek is expected to produce about 91% of its April-July average. Adequate water supplies are expected for this are approximately.

TREAMFLOW FORECASTS		THIS YEA	R	PAST	RECORD	SUMMARY of SNOW MEASUREMENTS			
		CAST	FORECAST	THOUSAND	ACRE FEET	RIVER BASIN and/or SUB-WATERSHED	Number of Courses	THIS YEAR AS	A PERCENT OF
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Parcent of Average	PERIOO	Last Year	Average †		Averaged	Last Year	Average
ROVO RIVER & UTAH LAKE						PROVO RIVER & UTAH LAKE	12	68	85
American Fork nr American Frk	28	96	Apr-July		29				
Hobble Creek nr Springville	18.0	112	Apr-July		16	JORDAN RIVER	4	96	103
Provo nr Hailstonel	108	106	Apr-July		102				-
Provo below Deer Creek Daml	115	104	Apr-July		111	TOOELE VALLEY	3	50	104
Spanish Fork at Thistle	38	119	Apr-July		32				
Strawberry Reservoir Inflow1	45	100	Apr-July		45				
Utah Lake Inflow	240	115	Apr-July	370	208				
Payson Creek nr Payson	Delay	ed	Apr-July		6.3				
ORDAN RIVER & SALT LAKE									
Big Cottonwood nr SLC	35	103	Apr-July		36				
Farmington Crk nr Farmington	8.5	109	Apr-July		7.8				
Little Cottonwood Crk nr SLC	35	100	Apr-July		35				
Parley's Creek nr SLC	13.0	111	Apr-July		11.7				
OOELE VALLEY									
Settlement Creek nr Tooele	2.0	91	Apr-July		2.2 ^b				
	0.5	71	Apr-July		0.7				

	RESERVOIR	Usable		Usable Storage			
Basin or Stream	KESEKVOIK	Capacity	This Year	Last Year	Average+		
SPANISH FORK	Strawberry	270.0	217.1	184.9	119.2		
UTAH LAKE	Utah Lake	883.9	900.1	827.3	642.3		
PROVO	Deer Creek	149.7	120.7	111.2	95.8		
SETTLEMENT CRK	Settlement Creek	1.2					

PEAK FLOWS

	PEAK FLOW (SECON	NO FEET)
FORECAST POINT	Forecast Range	Average †
Hobble Creek near Springville	100-300	210
Spanish Fork near Thistle	300-500	365

+ - 1958-72 Average

IITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE Federal Bldg. – Roam 4012 Salt Lake City, Utah 841138

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

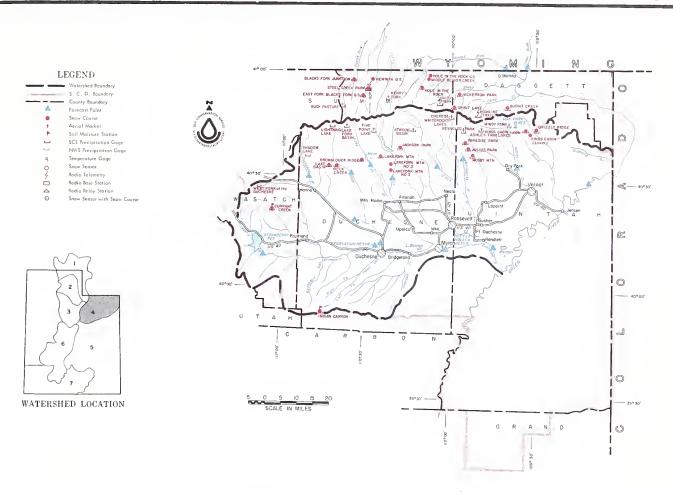


POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE
AGR-101



UINTAH BASIN and DAGGETT SCD's in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



APRIL 1, 1974

THE WATER SUPPLY OUTLOOK IS BELOW AVERAGE

SNOW COVER ranges from 54% of average on Ashley-Brush Creeks to 93% on Strawberry River. High elevation aerial marker readings were delayed by poor weather around April 1. Most snow courses had well below average increases during a dry March.

PRECIPITATION at mountain locations was only 50 to 86% of average.

SOIL MOISTURE is near average on the Upper Duchesne and Strawberry but below average on other watersheds in the Uintah Basin and at lower elevations.

RESERVOIR STORAGE is above average.

STREAMFLOW FORECASTS range from 64% of average on Ashley Creek to 133% for Flaming Gorge Inflow. Other streams in Uintah Basin range from East to West 69% on Whiterocks to 90% on the Duchesne at Tabiona. Water users in this area depending on natural flow are expected to have late season shortages. Those with reservoir storage will have an adequate supply.

884-8C8 PORTLAND OREG 1871 M7-0-2202

UINTAH BASIN and DAGGETT SCD's in UTAH

STREAMFLOW FORECASTS		THIS YEA	R	PAST	RECORO	SUMMARY OF SNOW MEASUREMENTS			
		CAST	FORECAST	THOUSAND	ACRE FEET	RIVER BASIN and or SUB-WATERSHED	Number of Courses	THIS YEAR AS	A PERCENT OF
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average +	THE COME AND THE C	Averaged	Last Year	Average
DUCHESNE RIVER						DUCHESNE RIVER	11	63	72
Duchesne nr Tabional	94	90	Apr-July		104				
Duchesne at Duchesne ¹	161	87	Apr-July		185	STRAWBERRY RIVER	3	84	93
Duchesne at Myton ¹	154	75	Apr-July		205				
Duchesne at Randlett ¹	172	78	Apr-July		220	LAKEFORK-YELLOWSTONE	3	45	55
Lakefork below Moon Lakel	56	81	Apr-July		69				
Rock Crk nr Mtn. Home	80	85	Apr-July		94	UINTAH-WHITEROCKS	2	58	61
Strawberry at Duchesne	50	89	Apr-July		56				
Uinta nr Neola	62	70	Apr-July		88	ASHLEY-BRUSH CREEKS	2	40	54
Whiterocks nr Whiterock	40	69	Apr-July		58				
Yellowstone nr Altonah	46	71	Apr-July		65				
			1						
FLAMING GORGE TO DUCHESNE RIVE	3								
Ashley Creek nr Vernal	32	64	Apr-July		50				
Henry's Fork at Linwood	40	89	Apr-Sept		45				
Flaming Gorge Inflow ¹	1566	133	Apr-July		1174	-			
1 - Observed flow corrected :	for chan	ge in	storage a	nd diver	sions				
	1	I	1 (
RESERVOIR STORAGE (Thousand Acre Feet) MID-MI	DNTH READING					DEAK ELOWS			

RESERVOIR STORAGE (Thousand Acre Feet) MID-MONTH READING

		DESCRIVOUR Usable		Usable Storage	
Basin or Stream	RESERVOIR	Capacity	This Year	Last Year	Average†
ASHLEY CREEK	Steinaker	33.3	29.2	29.5	22.3
GREEN RIVER	Flaming Gorge	3749.0	3087.0	2894.0	1588.0
LAKE FORK	Moon Lake	35.8	25.4	19.8	19.2
STRAWBERRY	Starvation	165.3	120.3	123.5	
UINTAH	Bottle Hollow	11.3	9.3	11.0	

PEAK FLOWS

50050107 801117	PEAK FLOW (SECON	O FEET)
FORECAST PDINT	Forecast Range	Average +
Ashley Creek near Vernal	400-800	906
Strawberry at Duchesne	300-750	628

+ - 1958-72 15 year average period

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE Federal Bldg. - Room 4012 Solt Lake City, Utah 84138

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300

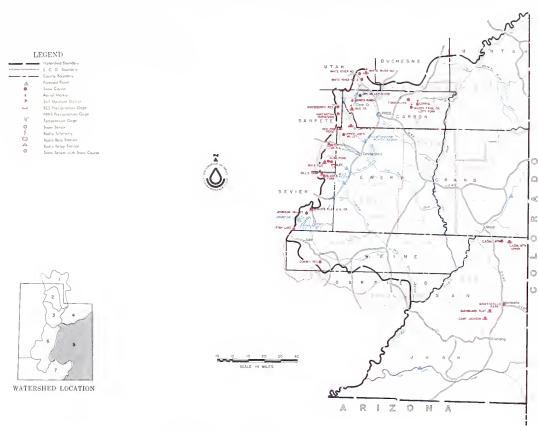


POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE



CARBON, EMERY, WAYNE, GRAND and SAN JUAN COUNTIES in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



APRIL 1, 1974

THE WATER SUPPLY OUTLOOK IS NEAR AVERAGE

SNOW COVER ranges from 70% of the April 1 average on the San Juan River to 102% on Mill Creek near Moab. Price River is 83% and San Rafael is 100% of average. A dry month caused most snow courses to show a loss instead of the usual increase.

PRECIPITATION at mountain locations ranged from 20% of the March average on the LaSals to 63% on the Upper Fremont River.

SOIL MOISTURE is near average at high elevations but drying out rapidly at lower elevations.

RESERVOIR STORAGE is well above average.

STREAMFLOW FORECASTS have been reduced due to a drier than average March and now range from 79% of average on the San Juan to 125% on the Fremont River. Scofield Inflow is expected to be 106% of the April-July average and Ferron Creek 114% of the April-July average. The Colorado at Cisco is forecast at 98% of average and the Green at Green River is 118% of the April-July average.

CARBON, EMERY, WAYNE, GRAND and SAN JUAN COUNTIES in UTAH

STREAMFLOW FORECASTS		THIS YEA	ı,R	PAST	RECORO	SUMMARY OF SHOW MEASUREMENTS			
	FORE		FORECAST	THOUSAND	ACRE FEET	RIVER BASIN and/or SUB-WATERSHED	Number of Courses	THIS YEAR AS	A PERCENT OF
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feer	Percent of Average	PERIOO	Last Year	Average +	MYCH SON SIS SIS SIS	Averaged	Last Year	Average
PRICE RIVER						PRICE RIVER	7	66	83
Gooseberry Crk nr Scofield	11.1		Apr-July		10.0				
Price nr Heiner ^l	62	97	Apr-July		64b	MILL CREEK	2	73	102
Scofield Reservoir Inflow	36	106	Apr-July	46	34	THE ORDER	_		
						SAN JUAN RIVER	2	40	70
SAN RAFAEL RIVER	52	113	Apr-July	60	46b				
Cottonwood Crk nr Orangeville	40	1	Apr-July		35	SAN RAFAEL RIVER	8	86	100
Ferron Crk nr Ferron	52		1 .		45				
Huntington Crk nr Huntington	54	116	Apr-July		4.5				
MUDDY RIVER									
Muddy Creek nr Emery	20	118	Apr-July		17.0				
UPPER COLORADO BASIN									
Colorado nr Cisco, Utah	2774	98	Apr-July		2835				
Green at Green River, Utah	3359	118	Apr-July		2839				
Navajo Reservoir Inflow	505	85	Apr-July		597				
San Juan nr Bluff, Utah	674	79	Apr-July		853				
Mill Creek nr Moab	6.0	122	Apr-July		4.9				
FREMONT RIVER									
Seven Mile Crk nr Fish Lake			Apr-July		6.4b				
1 - Observed flow corrected for	or chang	ge in s	torage at	hd diver	bions				

RESERVOIR STORAGE (Thousand Acre Feet) MID-MONTH READING

	DESCRIPTION OF THE PROPERTY OF	RESERVOIR Useble		Usable Storage			
Besin or Stream	KESERVOIR	Capacity	This Year	Lest Year	Average†		
PRICE RIVER	Scofield	65.8	45.5	24.6	31.0		
SAN RAFAEL	Huntington North Joe's Valley Mill Site	3.9 54.6 16.7	3.7 47.0 6.1	3.9 37.0 5.3	2.9 32.9		
SAN JUAN	Navajo	1696.0	985.5	972.8			
	15 year average per of all past record		an 15 yea	ars			

PEAK FLOWS

FDRECAST POINT	PEAK FLOW (SECONO FEET)				
FURECAST POINT	Forecast Range	Average +			
Ferron Creek near Ferron	300-550	419			
Muddy Creek near Emery	100-250	157			

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE Federal Bidg. – Raom 4012 Salt Lake City, Utah 84138

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

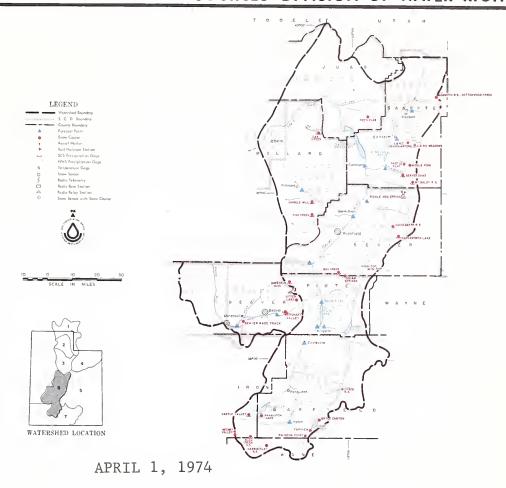


POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE



SEVIER RIVER BASIN including BEAVER RIVER in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



THE WATER SUPPLY OUTLOOK-RANGES FROM BELOW AVERAGE ON THE UPPER SEVIER TO ABOVE AVERAGE ON THE LOWER SEVIER

SNOW COVER ranges from 66% of the April 1 average on the South Fork to 134% of average on Chalk Creek. The East Fork is 83% and Beaver River is 102% of average. Most snow did not get the usual March increases and those on the Upper Sevier lost several inches of water during March.

PRECIPITATION at mountain locations ranged from 50 to 80% of the March average.

SOIL MOISTURE is near average at high elevations but lower soils are drying out at lower elevations.

RESERVOIR STORAGE is well above average. Sevier Basin storage is now 173% of the April 1 average and Minersville is 167% of average.

STREAMFLOW FORECASTS range from 61% of average for the April-July period at Hatch to 148% on Salina Creek. Chalk Creek is expected to be 128% of average and Beaver River is 99% of its April-July average for the 1958-72 period. Some late season shortages are expected for users of direct streamflow on the Upper Sevier. Other areas are expected to have adequate water supplies.

A-SCS-PORTLAND OREG 1871 M7-0-22027-6-L

STREAMFLOW FORECASTS		THIS YEA	R	PAST	RECORO
	FORE		FORECAST	THOUSAND	ACRE FEET
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Averege	PERIOO	Last Year	Average +
SEVIER RIVER					
Chalk Creek nr Fillmore	19.8	128	Apr-July		15.51
Clear Crk nr Sevier (abv Div.)	13.5	90	Apr-July		15.0
East Fork Sevier nr Kingston 1	12.0	83	Apr-July	56	14.4
Antimony Crk nr Antimony	6.5	83	Apr-July		7.3
Inflow			•		
Kingston to Vermillion Dam	40	80	Apr-June		50
Vermillion Dam to Gunnison	55	141	Mar-June		39
Salina Crk at Salina	12.0	148	Apr-June		8.1
Sevier nr Circleville	18.2	65	Apr-July		28
Sevier nr Gunnison	55	141	Apr-July	154	39
Sevier at Hatch	25	61	Apr-July	78	41
Sevier nr Kingston	13.0	62	Apr-July		21
Sevier below Piute Dam ¹	23	70	Apr-July		33
SAN PITCH RIVER					
Ephraim Crk nr Ephraim	18	129	Apr-July		13.91
Pleasant Crk nr Mt. Pleasant	8.5	109	Apr-July		7.8
BEAVER RIVER					
Beaver nr Beaver	19.8	99	Apr-July	38	20
Minersville Reservoir Inflow1	6.0	103	1 1		5.8
MINETSVILLE KESELVOIL INTIOM-	0,0	103	Apr-June		3.0

VOAMMIID	n.f	WOMP	MEACHDEMENTS

UPPER SEVIER	Averaged	Last Year	
UPPER SEVIER			Average
	12	39	73
EAST FORK SEVIER	6	43	83
SOUTH FORK SEVIER	6	36	66
LOWER SEVIER	12	90	122
CHALK CREEK	2	58	134
BEAVER RIVER	3	69	102

Average*
14.9
34.0
46.8
116.
14.3

PEAK FLOWS

EODECAST DOWN	PEAK FLOW (SECO	NO FEET)
FORECAST POINT	Ferecast Range	Average +
Beaver near Beaver	125-275	212
Clear Creek near Sevier	140-200	170
Salina Creek near Salina	240-300	235
Sevier River at Hatch	100-300	418
Sevier River at Circleville	130-342	304
Sevier River at Kingston	110-200	263

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow	Forecast Date	Average Date		
	Value	Stream Will Recede	of Low Flow		
	Second/Ft.	to Low Flow Value	Velue		
Clear Crk nr Sevier (Abv Div.) Salina Crk at Salina Sevier at Circleville Sevier at Hatch (upper)	5	July 10	July 28		
	25	June 12	June 10		
	90	June 2	June 24		
	100	June 10	July 10		

(apper)

 $\bf 1$ - Observed flow corrected for change in storage and diversions $\bf b$ - Average of all past record - less than 15 years

+ - 1958-72 Average

PRIMARY WATER RIGHT FORECASTS (PERCENT OF WATER RIGHT DELIVERED)

RIVER SECTION	Percent Forecest For This Yeer	The second secon		
SEVIER RIVER Below Vermillion Dam Circle Valley Panguitch Valley Sevier Valley	60 60 78 35	55 65 82 38	April-Sept. April-Sept. April-Sept. April-Sept.	

Inflow to Sevier Bridge Reservoir October 1 to March 31 was about 135,000 acre-feet after a heavy March flow from lower elevations.

Below Vermillion - Flow above 360 second feet should total about 3500-4000 acre-feet.

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE Federal Bldg. – Room 4012

Salt Lake City, Utah 84138

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300

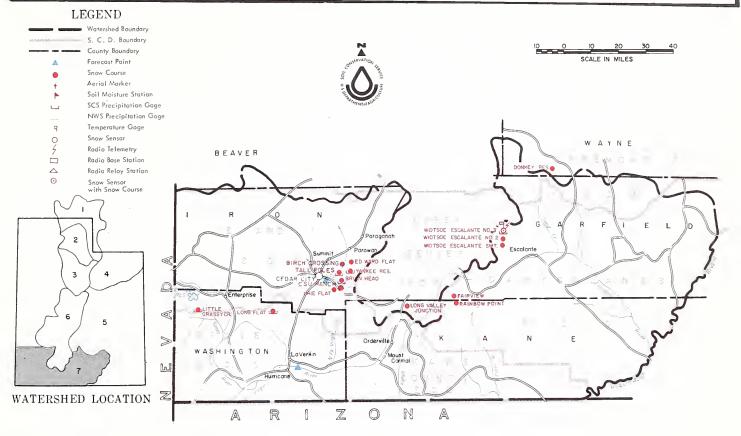


POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE
AGR-101



EAST GARFIELD, KANE, WASHINGTON and IRON COUNTIES in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



APRIL 1, 1974

THE WATER SUPPLY OUTLOOK IS BELOW AVERAGE

SNOW COVER ranges from 66% of average on Coal Creek to 94% on Parowan Creek. The Virgin River is now 76% of average after a very dry March. Most snow courses lost moisture during the month.

PRECIPITATION at mountain stations was well below average during March.

SOIL MOISTURE is near average at high elevation. Lower areas soaked up melting snow during March.

RESERVOIR STORAGE in Lake Powell is now 17,935,000 acre-feet or a gain of 338,000 acre-feet during March.

STREAMFLOW FORECASTS have dropped due to a dry March and now range from 52% of the April-June average on the Virgin to 104% of the April-July average for the inflow to Lake Powell. Coal Creek is forecast at 84% and the Santa Clara 83% of average. Some late season shortages are expected for water users depending on direct flow from streams in this area.

STREAMFLOW FORECASTS		THIS YEA	iR .	PAST	RECORO	SUMMARY OF SNOW MEASUREMENTS			
		CAST	FORECAST	THOUSAND	ACRE FEET	RIVER BASIN and or SUB-WATERSHEO	Number at Courses	THIS YEAR AS	A PERCENT OF
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feer	Parcent of Average	PERIOD	Last Year	Average †	NIVER BOSIN SIS OF STREET	Averaged	Last Year	Average
/IRGIN RIVER						COAL CREEK	3	34	66
Virgin nr Virgin Santa Clara nr Pine Valley	25	1	Apr-June Apr-June	1	48b 3.6b	PAROWAN CREEK	2	41	94
COAL CREEK						VIRGIN RIVER	2	31	76
Coal Creek nr Cedar City	13.5	84	Apr-July		16.1				
PPER COLORADO									
Lake Powell Inflow	7175	104	Apr-July		6881				
b - Average of all past record	- less	than	15 years						

RESERVOIR STURBLE (THOUSAILL ALLE TEEL) MID-MONTH READING						PEAK FLUWS				
	Basin or Stream RESERVOIR	Usable	Usabla Storage				PEAK FLOW (SECO	PEAK FLOW (SECONO FEET)		
Basin or Stream RESERVOIR	Capacity	This Year	Last Year	Average†	FORECAST POINT	Forecast Range	Averaga +			
COLORADO	Lake Powell Blue Mesa	25002.0 829.5	1	11966.0 308.9	8462.1	Coal Creek	125-375	245		
						Virgin River	400-650	631b		
			1							

^{+ - 1958-72 15} year average period

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE Federal Bldg. - Room 4012

Federal Bldg. - Room 4012 Salt Lake City, Utoh 84138

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE
AGR-101



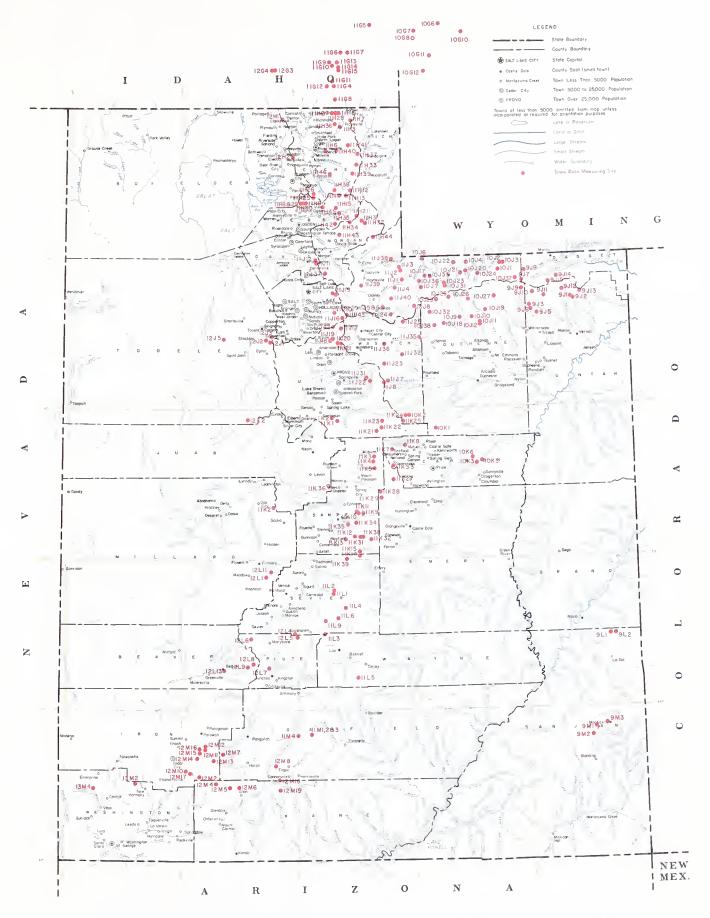
FIRST ALLA LANGE

SNOW		THIS YEAR		ļ	RECORD	PRECIP	ITATION	(Inches)			70.5
DRAINAGE BASIN and/or SNOW COURSE NAME	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Con	Average †	Date of	Month's	ATION +	FROM A	PPROX. OCT	Percent of
NAME	T	1		Last Year	Average	Reading	Precipitation	1	1	77.00	Average
GREAT BASIN				and the same of th							
UPPER BEAR RIVER											
(Above Harer, Idaho)											
Big Park	3/30	69	23.6	16.4	21.2	And a second sec					
Burts-Miller Ranch	3/26	19	7.0	6.1	6.1	3/26			10.95	9.03a	121
CCC Camp Gold Hill*	3/28	43 Data	14.8	11.2 lable fr	12.2						
Hayden Fork	3/26	43	15.6	12.4	16.0ь	3/26			21.60	20.48a	105
Kelly Ranger Station*	3/30	60	21.4	15.8	18.9	4/4	Data 1	ot Avai	lable fr	om USU	
LeBarge Guard Station Lily Lake*	3/26	101 Data	36.3 Not Avai								
Monte Cristo Ranger Station	3/30	69	28.4	24.4	25.6	3/30	4.10	4.73b	31.45	27.62b	114
Piney-LaBarge #2	3/26	74	25.8	24.4	23.8						
Poison Meadows Salt River Summit	3/26 3/28	102	35.3	22.9	30.8	3/28	4.30	2.57	18.70	16.74	112
Snyder Basin	3/26	55	18.2	12.5	16.6						
Stillwater Camp	3/26	31	10.8	8.6	11.0	3/26			14.40	12.01	120
LOWER BEAR RIVER											
(Below Harer, Idaho)				Ì							
Bug Lake*	4/4	Data	Not Avai	lable fr	om USU						
Christensen Ranch	3/25	21	8.5	10.6	7.1						
Cinnamon Creek* Clarkston Mountain*	4/4	i	Not Avai Not Avai	1							
Cub River Ranger Station	3/27	22	9.5	9.0	6.1						
Curtis Creek*	4/4	1	Not Avai		1						
Dry Basin	3/27 3/26	83 12	32.9	27.4	3.3						
Dry Creek Flat Deer Springs*	4/4		Not Avai								
Emigrant Summit	3/25	72	29.4	22.6	25.4						
Emigration Canyon	3/25	25	9.2	10.6	10.7	, , ,	7		1 1.1 - 6		
Franklin Basin* Garden City Summit	4/1	84 52	33.9	21.2	28.6	4/4	4.15	ot Avai		19.72b	108
George Peak*	4/4	_	Not Avai			-7/1	7.13	3.040	21.50	13.725	100
Hardware Ranch*	4/4	Data	Not Avai		1						
Hells Canyon* Herd Hollow*	4/4	l	Not Avai Not Avai		1 1						
Horseshoe Basin	3/27	70	28.2	24.9			}				
Hyrum Dam*	4/4		Not Avai								
Klondike Narrows*	4/1	58	23.9	17.8	20.7	4/4	Data N	ot Avai	lable fr	om USU	
Liberty Spring Little Bear (lower)	3/27	116 30	46.7	32.6 16.6	36.8a						
Little Bear (upper)*	4/2	42	14.7	20.2	11.6	4/4	Data N	ot Avai	lable f r	om USU	
Oxford Mountain	3/26	20	8.0	12.2	8.2						
Slug Creek Divide Steep Hollow #1	3/27 4/1	42 112	15.0 46.8	16.5 28.0	16.7 38.4b						
Steep Hollow #2	4/1	82	32.8	20.4	27.1						
Strawberry Creek	3/25	32	12.6	13.9	10.0						
Strawberry Mink Divide Tony Grove Lake*	3/25 4/4	59 Data	24.9 Not Avai	24.2 Nable fr	21.5						
Tony Grove Ranger Station*	4/1	25	11.1	9.7	10.4	4/4	Data N	ot Avai	lable fr	om USU	
Trigara Springs	4/4		Not Avai			0.407					
Willow Flat	3/27	42	17.0	15.0	13.3	3/27	3.30	3.78b	27.78	22.80ъ	122
OGDEN_RIVER											
	2 (25	2.5	1.								
Beaver Creek-Skunk Creek Ben Lomond (lower)	3/30 3/31	26 35	11.2 15.3	15.4 27.7	11.5	3/31	4.15	3.48	20.89	24.73	84
Ben Lomond Peak*	3/31	81	35.0	52.6	34.9	4/4		ot Avai			04
Ben Lomond Trail	3/31	36	15.5	30.5	14.8Ъ				:		
Causey Dam Cutler Creek	3/31	64	29.8	41.8	25.7Ъ	3/30	1.95	2.28a	16.94	14.31a	118
Dry Bread Pond	3/30	50	19.6	20.4	17.9	3/30	2.65	3.56b	20.10	20.77ь	97
Guilder's Peak*	4/4	Data		ilable f	rom USU						
Magpie* Middle Fork Ogden*	4/4 4/4		Not Ava								
Middle Fork Ogden* Powder Mountain Hideaway	3/26	Data 85	Not Ava	ilable i	rom USU						
Powder Mountain Sundown	3/26	76	30.4								
Sagebrush Flat	3/30	0	0.0	5.8	1.6	3/30	2.10	2.28ъ	15.26	14.32ь	107

ORAINAGE BASIN and/or SNOW COURSE	Date			Water Conte							TO OATE
NAME	of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average †	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
TEDED DIVED											
VEBER RIVER											
Beaver Creek Ranger Station	3/24 3/26	14	6.1	8.9	7.2						
Chalk Creek #1 Chalk Creek #2*	3/26	44	15.2	14.4	14.9	4/4	Data N	ot Avail	able fr	om licii	
Chalk Creek #3	3/26	16	6.4	8.6	7.4	3/26	2.35	2.59a		12.12a	124
Farmington Canyon (lower)**	3/28		21.0a	28.8	22.2	3,23	1	2.574	1300	127123	
Farmington Canyon (upper)**	3/28		31.2a	34.1	29.5	-					
Farmington Guard Station						4/3	Not Me	asured			
Francis Canyon*	4/4	1	Not Avai	1	1						
Hardscrabble*	4/4		Not Avai								
HooDoo Knoll*	4/4	1	Not Avai		_	, :					
Horse Ridge** Park City Summit	3/28 4/3	114	28.4a	20.6	22.8						
Parley's Canyon Summit	3/29	50	18.9	19.2	17.9	3/29	2.53a	3.86	23.66	22.02	10
Porcupine*	4/4	1	Not Avai	1		3,2)	2.554	3.00	23.00	22.02	10
Redden Mine (lower)	3/26	39	14.7	17.7	17.7						
Redden Mine (upper)	3/26	44	17.8	20.4	19.6	3/26	2.15	3.71a	22.43	19.97a	11
Sargeant Lakes*	4/4	Data	Not Avai	lable fr	om USU	•					
Shingle Mill Flat*	4/4	Data	Not Avai	lable fr	om USU						
Smith & Morehouse	3/24	30	11.3	11.1	12.6	3/24	2.08	3.15	18.71	18.09	10
PROVO RIVER & UTAH LAKE											
Camp Altamont Clear Creek Ridge #1	3/28 3/26	19 45	7.8	19.3 21.0	13.1 18.0						
Clear Creek Ridge #2	3/26	39	14.3	15.7	13.2	3/26	1.00	2.78		15.30	
Clear Creek Ridge #3	3/26	7	2.9	8.8	5.5						
Dutchman Ranger Station	3/28	26	12.0	21.4	16.1	3/28	1.55	3.13b	14.83	20.95Ъ	7
Hobble Creek Summit	3/27	25	11.5	16.8	12.4	3/27	1.00	2.78	17.25	16.66	104
Packard Canyon	3/27	15	6.6	12.9	8.2						
Payson Ranger Station	4/4		red Dela								
Rock Bridge	4/4	1	red Dela		10.0	2 /2/	1 05	0 / 7	16 70	15 60	1.0
Soapstone Ranger Station	3/24 3/28	28	0.0	9.6 11.4	12.0	3/24	1.25	2.47	16.78	15.69	10
South Fork Ranger Station Timpanogos Cave Camp	3/28	0	0.0	0.0	.8						
Timpanogos Cave Camp Timpanogos Divide	3/28	44	17.0	28.2	22.5	3/28	2.30		17.45		
Trial Lake	3/24	70	25.9	23.1	25.6	3/24	2.10	3.76	23.26	23.02	10
East Shingle Lake	3/26	75	27.8			-,					
JORDAN RIVER & SALT LAKE											
Bevan's Cabin	3/27	29	11.6	27.4	10.0						
Lamb's Canyon	3/28	41	16.1	15.6	14.6						
Lamb's Canyon #2	3/28	39	15.4	16.9	14.5	3/29	2.79a		18.11		
Middle Canyon - Tooele	4/1	32	13.2	24.7	13.0	3/31	2.75	3.23ъ		16.65ъ	
Mill Creek	4/4	I	rement N		1						
Mill D South Fork	3/27	45	20.6	20.8	19.4						
Rocky Basin - Settlement Cyn	4/1	63	25.5	47.4	25.3	4/1	2.23		20.57	:	
Silver Lake (Brighton)	3/27	59	23.8	26.1	24.8						
Vernon Creek	3/31	14	4.9	20.0		3/31	1.25		10.69		
JPPER SEVIER RIVER (South											
of Richfield, Utah)										10 -	
Box Creek Bryce Canyon	3/27 3/29	39	13.7	17.1 11.3	12.3	3/27	1.37	2.65	14.90	13.70	10
Castle Valley	3/29	20	7.2	18.6	12.2	3/29	1.70	2.69	10.59	14.55	7:
Duck Creek Ranger Station	3/28	16	6.4	23.7	12.2	3/27	2.40	3.02ь	10.85	17.25ь	
Farview	3/28	0	0.0	17.8							
Harris Flat	3/28	0	0.0	16.8	6.6						
Kimberly Mine	3/25	42	16.7	21.9	15.0	3/25	2.01	4.08	17.82	17.32	10
Midway Valley	3/28	43	15.0	35.9	20.8	3/28	2.35	1 0/.	13.95		
Panguitch Lake	3/29	1	0.3	9.3	2.7	3/29	.87	1.24	5.45	7.19	7
Rainbow Point	3/28	0	0.0	14.5	 6 /						
Squaw Springs	3/27	18	6.9	11.3	6.4				1		
Widtsoe Escalante #2	3/27	22 28	7.6	20.2	10.2	3/27	1.47	2.23	10.06	12.60	8
Widtsoe Escalante #3 Widtsoe Escalante Summit	3/27	11	3.8	13.8	5.9] 3/2/	1.4/	2.23	10.00	12,00	0
Widtsoe Escalante Summit Widtsoe Ranger Station	3/2/	11	3.0	15.0	3.7	3/27	1.35		3.36		_
MIGEOR Manker Praction									3.30		

SNOW		THIS YEAR			ECORD	PRECIPI	TATION	(Inches)	EBON .	PPROX. OCT	TODATE
DRAINAGE BASIN and or SNOW COURSE NAME	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Conti	Average †	Date of Reading	Month's Precipitation	+	This Year	Average +	Percent of Average
	I	1				T KEGGINE				<u> </u>	
(Including San Pitch)											
Beaver Dams	3/27	31	13.6	12.8	11.0	3/27	1.05	2.75	17.15	13.27	129
Farnsworth Lake	3/22	63	24.4	26.5	18.5	3/22	3.10	4.34	22.65	19.10	118
G.B.R.C. Headquarters G.B.R.C. Majors	3/28	46	18.8	20.4	15.9	3/29	1.25		19.80		
G.B.R.C. Meadows	3/29	66	27.4	27.8	24.7	3/29	1.80		23.53		
G.B.R.C. Oaks	2/22	44	10 /	17.5	11 2	3/29 3/22	1.20		13.15 15.40		
Gooseberry Ranger Station Mammoth R.SCtnwood Crk	3/22 3/28	46	18.4	17.5	11.3	3/22	1.40	3.29 ^b	17.70	18.64 ^b	95
Middle Fork	3/26	66	26.0	27.6	23.3						
Mt. Baldy Ranger Station Oak Creek	3/27 3/29	71	27.9	26.6	22.5	3/27 3/29	1.55	3.42 ^b	20.70 16.41	17.28 ^b	
Pickle Keg Springs	3/25	45	19.0	22.5**		3/29			10.41	14.04	1 112
Pine Creek	3/28	46	20.4	31.3	14.3	3/28	2.85	4.78	28.31	22.42	126
Rees' Flat Shingle Mill	3/21 3/28	41 26	15.4	14.6	12.1 8.5b	3/21 3/28	1.10	2.985	 17.93	13.71b	131
Thistle Flat	3/26	44	18.5	18.9	15.8	3/20	2.01	2.700	17.75	13.710	151
BEAVER RIVER								n + + + + + + + + + + + + + + + + + + +			
Beaver Canyon Power House			The state of the s			3/31	.93	1.83	9.82	8.90	110
Beaver Race Track	3/25	0	0.0								
Big Flat	3/26	49	15.6	24.1	17.2	3/26	1.38	3.49	14.37 13.16	16.39 13.83 ^a	88 95
Merchant Valley Otter Lake	3/26	42	14.7	19.6	13.9	3/20	1.23	3.01	13.10	13.03	95
PAROWAN CREEK											
Birch Crossing	3/27	10	3.5	10.5							
Brian Head	3/24	51	19.6	28.4							
Ed Ward Flat	3/27	17	6.6	17.1	6.9						
Tall Poles Yankee Reservoir	3/27 3/27	35	13.1	19.8	9.2	3/27 3/27	1.75	3.184	13.75 12.52	17.89 ^a	77 106
COAL CREEK											
SUSC Ranch	3/28	1	0.3	15.3	5.4a			da de la companya de			
Sose Ranen	3/20	1	0.5	15.5	J.+			1			
ENTERPRISE TO NEW HARMONY DRAINAGES				And the state of t							
Little Grassy Creek Long Flat	3/29 3/29	0 8	0.0	17.9 21.0	1.1b 4.8b		1.45	1.78b 2.34b			82 108
	3,23					3/2/	.00	2.310	11.03	10.755	100
COLORADO RIVER BASIN											
UPPER GREEN RIVER - UTAH											
Ashley Twin Lakes A	4/4	Measure	ment Del	ayed							
Black's Fork Junction	3/26	35	11.6	7.5	9.6b		1.73	2.28b		1	116
Black's Fork G. SEast Fork Buck Pasture A	3/26 4/4	32 Measure	9.5 ment Del	7.2	9.7b	3/26	1.87	2.44b	13.49	11.87b	114
Burnt Creek	3/22	16	4.4	6.3		3/22	1.25	1.48	9.50	9.01b	105
Grizzly Ridge Henry's Fork A	3/20 4/4	24 Measure	7.2 ment Del	13.3		3/20	1.45	2.200	9.65	13.44	72
Hewinta G. S.	3/26	36	10.8	8.3	9.9	3/26	2.38	2.55Ъ	15.34	12.50b	123
Hickerson Park	3/22	22	6.9 L Availa	7.8	6.3b	3/22	1.35	1.64a	10.60	8.29a	128
Highline Trail* Hole-in-the-Rock G. S.	4/4		Reading		050						
Hole-in-the-Rock	4/3	Delayed	Reading					proprieta de la constantina della constantina de			
King's Cabin (lower) King's Cabin (upper)	3/20 3/20	14 24	4.0	12.2 13.7	8.8	3/20	1.10	2.16	7.15	11.26	64
Middle Beaver Creek	4/3	Delayed	Reading			3/20	1.10	2.10	7.10	11.20	04
Reynolds Park A Spirit Lake	4/4 3/22	Data No	t Availa	ble from	1	2/22	1 05	2 (5)	10.00	1/- 1/2	00
Spirit Lake Steel Creek Park	3/22	38	10.3	16.6 12.8	12.7b		1.95	2.656	12.80	14.16b	90
Windy Park A	4/4	1	t Availa								
DUCHESNE RIVER											
Atwood Basin A	4/4		ment Del	-		2/20			15 /0		T-
Brown Duck Ridge Chepeta-Whiterocks Lakes A	3/28	52 Measure	15.7 ment Del	24.8 aved		3/28			15.40		

SNOW		THIS YEAR		PAST R	ECORD	PRECIPI		(Inches)			
DRAINAGE BASIN and/or SNOW COURSE NAME	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Cont	Average †	Date of Reading	Month's Precipitation	ATION Average +	This Year	Average †	Percent of Average
DUCHESNE RIVER (continued)						Reading	, recipitation				- Artinge
Currant Creek Daniels-Strawberry Summit East Portal Five Point Lake A Indian Canyon	4/1 3/28 3/30 4/4 3/25	14 28 24 Measurer	5.6 11.8 11.0 ment Del	10.2 16.3 12.6 ayed	8.4 14.2 10.8	4/1 3/28 3/30	1.23 1.35	3.01 2.49b	8.97 16.13 16.86	13.62 17.61 18.17b	66 92 93
Jackson Park Julius Park Lakefork Basin A	3/27 3/31 4/4	1	8.4 e Destro	ſ	12.3	3/27 3/21	1.20	 1.88b	10.42 8.50	12.80a 12.84b	81 66
Lakefork Mountain Lakafork Mountain #2 Lakefork Mountain #3 Lightning Lake A	3/26 3/26 3/26 4/4	1	8.4 3.3 1.6 ment Del	1 -	11.1 7.4 5.8	3/26	1.19	2.02	10.78	12.24	88
Mosby Mountain Paradise Park Rock Creek Strawberry Divide	3/21 3/21 3/29 3/30	20 28 11 47	5.6 7.8 3.7 17.9	9.8 13.4 8.0 19.6	9.8 12.0 6.1 18.9	3/21 3/21 3/29	1.67 	1.67a 1.94b	7.79 9.22 8.69	10.83a 14.89b	72 62
PRICE RIVER											
Corral Dry Valley Divide Gooseberry Reservoir Grassy Trail-Left Fork Jones Ranch	4/3 3/28 3/28 4/3 3/28	14 16 43 15 8	4.9 6.6 18.2 4.9 3.0	12.9 13.0 22.6 14.2 8.4	7.3b 9.2 19.1 8.8b 5.3	3/28	1.40	3.18	19.38	18.18	107
Mud Creek #2 Timberline White River #1 White River #2 White River #3	3/28 4/3 3/29 3/29 3/29	26 37 35 15 8	9.8 9.2 13.5 6.7 2.7	15.0 19.4 14.3 8.6 9.3	12.6 14.1b 12.6 7.5 6.5	3/28	1.22	2.60ъ	12.92	14.20b 14.28	91
SAN RAFAEL RIVER											
Buck Flat Huntington-Horseshoe Orange Olsen Red Pine Ridge Rush Pond Seeley Creek	3/27 3/28 3/29 3/29 3/27 3/28	46 52 C 44 40 43	18.3 21.8 0.0 16.8 14.0 17.0	16.9 26.2 5.1 16.1 15.8 24.4	16.2 23.7b 17.1b 13.6 15.7	3/27 3/29 3/29	1.90 .45 1.85	3.01 1.05a 3.49	6.20 20.35	17.30 8.98a 20.31	107 69 100
Stuart Ranger Station Upper Joe's Valley Wrigley Creek	3/29 3/29 3/27	15 26 31	5.4 9.5 11.2	10.0 10.2 13.3	7.0 9.7 10.9	3/29			11.15	12.16	92
MUDDY RIVER											
Black's Fork Dill's Camp	3/26 3/26	40 40	15.1 14.8	15.7 14.4	13.2 11.8	3/26	1.45		15.85	14.33a	111
FREMONT RIVER Black's Flat-U.M. Creek	3/25	38	13.2 5.0	13.2 14.2	10.5	3/25	1.76	2.81	14.11	12.15	116
Donkey Reservoir Fish Lake Johnson Valley	3/26 3/25 3/25	19 30 27	10.9	11.4	7.2 5.8 6.3	3/25	. 97	1.82b	9.32	9.36b	100
MILL CREEK											
LaSal Mountain (lower) LaSal Mountain (upper)	3/25 3/25	22 44	8.5 16.7	13.8 20.8	9.0 15.7	3/25	.70	3.41b	12.35	15.67ь	79
SAN JUAN RIVER											
Buckboard Flat Camp Jackson Monticello City Park	3/26 3/26 3/26	21 20 0	7.7 8.3 0.0	20.7 19.8	11.8 11.2	3/26 3/26	1.30 1.10	3.02 2.52b	12.05 11.65	18.02 15.92b	67 73
VIRGIN RIVER											
Long Valley Junction Webster Flat Kolob-Crystal	3/24 3/28 4/1	0 31 46	0.0 11.9 17.5	11.9 28.4 33.7	2.1 15.3	3/28	2.60	3.60		19.27	
a - Partly Estimated b - Average of all past recor ** - SCS Radio Reading	d - less	than 15	years			+ - 195	-SCS Coc 8-72 Av∈ ial Read	rage	e Radio	Reading	



SNOW COURSES AND RELATED DATA MEASURING SITES UTAH



1974

SCALE I-1,500,000 ALBERS EQUAL AREA PROJECTION

2	
Z	
\overline{S}	
ASIN	
8	
~]
RIVER	
N N	
\overline{z}	
_	
000	
	4
COLORADO	
~	
0	
ᅥ	
\mathbf{g}	
UPPER	
Щ	
7	
=	
વ્દ	
2	
⋖	
BEAR	
8	
Ť	•
Z	
~	
UTAH,	
2	
DEX	
屵	
4	

	ELE:	77,300 77,300 77,300 77,300 77,300 77,300 88,300 88,300 77,300 77,300 77,300	7,500 7,900 7,900 7,900 7,900 7,900 7,600 7,600 7,600	200 000 000 000 000 000 000 000 000 000	8,500 8,700 8,700 8,850 8,800 8,800 8,800	7,050 9,500 9,500 9,500 9,500		
	RGL	15E 10 20 6 8 10 10 10 10 10 10 10 10 10 10 10 10 10 10 1		556 556 666 566 566 568 568 568 568 568				
	d. ×. ≥	22ZZ22ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		195 175 175 175 175 175 175 175 175 175 17		4 (4	الله الله الله الله الله الله الله الله	
	SEC	21 22 23 33 33 33 33 33 33 33 34 34 37 77	22 22 22 33 33 31 32 32 33 33 34 34	23 25 12 5 5 24 25 8 & 9 27 27			Aeral Mar Precipian	
	S	2 2 2 2 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4	74 544 -6 41 6	802 803	33 35 35 24 AINAGES 22 22 55	0 000 00	mple) Gage Station.	
			*		H D R		LEGEND LEGEND Colly	Only Gage Onl
		DUCHESNE RIVER Ahvood Basin Brown Duck Lake Brown Duck Lake Brown Carek Chepero Whiterocks Lakes: Crizelly Ridge Indian Caryon Jackson Park Julius Park Luke Basin Lakefork Basin Lakefork Basin Lakefork Manutain #2 Lakefork Manutain #2 Lakefork Manutain #3 Lightning Lake Maday Manutain #3 Maday Manutain #3 Maday Manutain #3 Paradise Perk Maday Manutain #3 Paradise Perk Road Creek	Madoow Lock of the Duchesne PRICE RIVER Correl Gooseberry Reservoir Gorsy Troil Creek-Left Fork Huntington-Horsehoe Mud Greek White River #1 White River #2	> '= 60	Unis Camp Block's flet-U.M. Creek Block's flet-U.M. Creek Donkey Reservoir. Fish Loke Reservoir Johnson Valley SOUTHEASTERN UTA SOUTHEASTERN UTA Gamp Jockson Los Sal Mountain (Inges)	VER 2 3	LE see and Piece and According to a see, Soul Piece Piece Soul Piece	re Station er Only. scipitation rainage.
		DUCHESNE RIVER Memoral Brain Information of the Memoral Information Compoundation Compoundation Compoundation Compoundation Park Adder Brain and Memoral Brain Information	the Du / E R / E R Creek- Horsesh # 1 # 3	SAN KAFALL KIVER Buck Flore Gooseberry Reservoir Huntingson-Horseshoe Red Fine Ridge Red Fine Ridge Sceley Creek Sceley Creek Schurt R. S. Upper Joe's Valley Wrigley Greek MUDDY RIVER Pallock's Fork	FREMONT RIVER Block's Flot-U.M. Greek Donkey, Reservoir Fish Lake Johnson Volley SOUTHEASTERN UTA Grap Jockson Losal Manuthain	CSCALANTE RIVER SCALANTE RIVER Widtsoe-Escolonte Summi Widtsoe-Escolonte 42 Widtsoe-Escolonte 42 Widtsoe-Escolonte 43 Widtsoe-Escolonte	Aby Court Show Courts Show Cou	A Property
	ш	CHESN Duck Tocheck Toc	Androw Lore from to free from to free from to free from to free from the free free free free free free free fr	8uck Flor Buck Flor Gooseberry Reserve Untrington-Harsels Red Fine Ridge Red Fine Ridge Seeley Creek Short R. S. Short R. S. Wrigley Creek Wrigley Creek MUDDY RIVER	MON1 MON1 C's Flat- ey Rese ey Rese con Vall THEA Jackso Jackso	Monticello Park SCALANIE RI Widtsoe-Escolante Widtsoe-Escolante Widtsoe-Escolante VIRGIN RIVER Ong Valley Junctif	0077 0077 A 0077 A 000000	
	NAM	DUC Brown Brown Brown Chra Frve Grive Loke Loke Loke Loke Loke Loke Loke Lok	PR I. PR I. Corr Goog Grass Hunt Jone Mud Timb White White	Buck Buck Goog Hunt Red I Rush Seek Stua Uppe Wrig	FRE Black Donk SOLUS SOLUS Buck Lase Lase Lase Lase Lase Lase Lase Lase	ESC Width Width Width Width VIR VIR VIR Webs	000000	222
	STATE	222222222222222	222222222	22222222 23	0 0000 0005	222 22		
		10.2% pp. 10.1%	11/35P 11/35P 11/48 11/47 11/47 11/43 10/46 11/43 11/43 11/43	11K31P 11K4P 11K5 11K2BP 10K2MP 11K27 11K27 11K32 11K32	33P 6 6 7	26.7 11.0 11.0 11.0 12.0 12.0 12.0 12.0 12.0		
	ON		22 \$\frac{1}{2}1	######################################	111.4P 111.3P 111.3P 111.6 9.M1P 9.M1P 9.M2P 9.M2P	97.7 VIII VIII VIII		
	ELEV.	7,7000 7,7000 7,7000 7,7000 7,7000 7,7000 7,7000 7,7000 7,7000 7,7000 8,800 8,900 8,90	2, 200 2, 300 3,	9,700 7,760 8,200 8,200 10,200 9,300 9,300	8,100 10,000 8,300 8,800 8,700 8,450	8,000	550 7725 7725 7725 7726 7726 7726 7726 7726	800 400 000
	A GE.			33.86			(
	W.P.		er)	1955 1755 1755 1755 1755 1755 1755 1755	355 9W 365 9W 355 9W 355 9W 355 9W 375 9W 375 10W	385 17W 385 17W 385 14W	Vochesna Ri 32 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
	F Ü	ď,	70		23 20 35 35 35 35 35 35 35 35 35 35 35	0 K W W	ove D	
	SEC.	SALT LA 124 124 127 14 18 18 18 18 18 18 18 18 19 19 19 21 21 35 26 27 27 27 27 27 27 27 27 27 27 27 27 27	25 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	24 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	23 10 17 26 & 20 20 18 11	15 385 17W 2 14M 17M 17M 17M 17M 17M 17M 17M 17M 17M 17	UTAH (eb. 23 23 23 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	23
SZ		<u> </u>	(Including 27 26 Creek			T	Z	
ASI		JORDAN RIVER & GREAT Bevan's Cabin Desert Fack Faminighor Canyon (lover) Faminighor Canyon (lover) Amid Scaryon (Pper) Mills Scaryon Mills	ilijeh - Top Mountain Kimberty Mine Miswoy Volley Monguirde Lake Bonguirde Lake Bonguirde R. S. Guldsoe R. S. LOW ER SEVIER RIVER Beaver Dam Germaworth Lake G. B. R.C. Headquorters G. B. R.C. Meadwar G. B. R.C. Meadwar Mourmanh R. S.	Mit. Baldy R.S. Mod Creek Pickle Keep Springs Pickle Kees Springs Reas's Flore Reas's Flore Reas's Flore BE A V E R R I V E R Beover Race Track Big Flor Race Track Gig Flore Otter Loke Otter Loke Otter Loke	¥	ž Z	11 VER	
쩌 _} 떠		RIVER in conyon on #2 on N Settlem Brighter ind Voller in N R.S.	ne ey ke ey ke hit	S. prings IVER Track alley	J CREI	Geek	MAGE EEN REEN ROCK G. (lower) (lower) (lower)	ž ž
≥		JORDAN RIV Bevori's Cabin Deseret Pook Formington Canyo Formington Canyo Formington Canyo Formington Canyo Middle Comyon Formington Form	High-Top Mountain Kitheerty Minne Midway Volline Midway Volline Midway Volline Squaw Springs Squaw Springs Widroe R.S. UWER SEVIER Beaver Dam Fornsworth Lake 60.8 R.C. Headquort G. B.R.C. Meandway G. B.R.C. Meaddway G. B.R.C. Meaddway G. B.R.C. Meaddway Midlall E.M.C. Meadway Midlall E	Mr. Beldy R. S. Okok Creek Pickle Keek Pickle Keek Pickle Springs Pickle Springs Piskle John James Bers's Flore Piskle Flore BE A VER R IV VER Beover Rece Track Big Flore Big Flore Big Flore Big Flore Check Track Big Flore Check Track Big Flore Check Track C	PAROWAN CREEK Birch Crossing Biron Head Edward Head Call World Poles Yonkee Reservoir COAL CREEK CSU Ranch Uite Flart	EN LEKPKISE 10	VER DRAINAGE UPPER GREEN RIVER Ashley Twin Lakes Black's Fork Junction Black's Fork Junction Buck Posture Revenue G.S. Hickerson Pork Heighter Co.S. Hickerson Pork Heighter Co.S. King's Cabin (lower) McCoy Pork Middle Benever Creek Reynolds Pork Reynolds Pork Spirit Lider Reynolds Pork Reynolds	Creek ranna Park
DO RIVER BASINS	NAME	JOR Bevor Bevor Deser Formi Formi Mild Mild Mild Rocky Snow Venow Venow Venow Venow Venow Venow Venow Venow Venow Venow Mild Snow Ve	High- Kimb Midw Rainb Squov Wids LOW LOW Forms G.8.	MAT. BOOK Pickle Pine Pickle Pine Pine Pine Pine Pine Pine Pine Pin	Birch Brian Ed We Yanka C O A	Little	RIVER DRAINAGE UPPER GREEN F Ashley Twin Lakes Block's fork G.SE Block's fork Junction Block's fork Junctio	Yeel Tokew Windy
RAD	STATE	222222222 22222	222222 222222	222222	22222 22	22		090
COLORA		12.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	111.9P 12.66P 12.072M 12.073P 12.073P 12.15 11.11P 11.11P 11.11P 11.12P 11.12P	11K12P 11K2P 11K39PT 11K39 12L1P 11K35 12L13 12L7PT 12L9P	2M16 2M14 2M12 2M15P 12M11P 12M17 12M10	13M4MP 13M2MP	COLORADO COLORADO 9,111,6 U 10,12,4 U 10	11P
	0 2		1222222	11K12P 11K3P 12L1P 11K36 12L11P 11K35 12L11P 12LP 12LP 12LP	12V 12V 12V 12V 12V 12V	13W 13W	6	2002
PEF								
& UPPER	LEV.	8,700 77,800 10,000 7,800 8,200 8,200 8,200 8,50	8885 44490 350 350 350 350 350 350 350 35	0000 8800 2525 2500 100 100	6 6 000 6 6 000 6 6 000 6 6 000 7 7 7 7 00 7 7 7 00	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	98,98,000 98,	800
	Ē.							
8 E	P. RGE.		255 41E 600 A 4 E 600 A 4			37.52.22.22.22.23.33.35.52.22.23.33.35.23.23.23.23.23.23.23.23.23.23.23.23.23.	_	
AH,	Ψ±	· ·	5					
INDEX TO UTAH, BEAR	SEC	UPPER SEAR RIVER (above Harer, Idaho Big Park Buttr-Miller Ranch CCC Comp Could Hill Lote Mindre Cristo R. S. Fill Lote Control Country Could Hill Country Cou	34 8 2 3 3 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 8 3 4 8 8 3 4 8 8 8 8	33 33 35 15 11 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	22 34 34 5 1 3 3 4 5 1 5 6 1 5	7 & 20 27 20 28 20 20 20 20 20 20 20		33 2
2		elow H					LAKE	
		ER (ob	rion routh)	de rotion Creek		ŧ	UTAR	<u>-</u>
Z		Station Station R.S. ** ** ** ** ** ** ** ** ** ** ** ** *	in i	ain oon wide #1 1 #1 1 #1 1 #1 * * * * * * * * * * *	ower) rail k k t c c c c c c c c c c c c c c c c c	on Summ	(lower) (upper) is sis Flat house the & the side #1 Sidge #2 Sidge #2 Sommit Sommit Som on	ivide
	VAGE	IPPER BEAR RIVE gi Park curis-Miller Ranch CC Camp cold Hill cold Hill cold Hill cold Hill cold Hill cold Hill cold Fork cold Hill	iver Rar Creek Ssin ssin rar & Flore rar &	Oxford Mountain Mutch Logan Oxford Mountain Mutch Streep Hollow #1 Streep Hollow #2 Streep Hollow #3 Streep Hollow	Ben Lomond Peock Ben Lomond (lower) Ben Lomond (lower) Ben Lomond Trail Gausey Dam Cutler Creek Dry Beard Pond Goulder's Peock Magple Middle Fork Ogden Sagebrush Flot R R R V E R R R R S.	Creek Creek Creek Stabble Oo Knoll Ridge e Creek ireek Lity Smt	Redden Mine (lower) Redden Mine (lower) Sergeant Lakes Single Mill Flot Single Mill Flot Single Mill Flot Camp Altomont Clear Creek Ridge # 1 Clear Creek Ridge # 1 Clear Creek Ridge # 2 Daniels - Struwberry Su, butchman R. S. East Portol Anable Creek Summit Packer Creek Summit Machae Creek Ridge # 2 South Ridge # 3 S	nogos D nogos D lake
	NO. STATE NAME GREAT BASIN DRAINAGE	UPPER BEAR RIVI Big Park Burt-Miller Ranch CCC Comp × Gold Hill Keyden Fork Keyden Fork Keyden Fork Monte Cristo R. S. Ping Volesce × Poison Meadows × Soll River Summit × Soll River Summit × Soll River Summit × Bug Lake Burdegnass Univer Re BEAR RIV Bug Lake Burdegnass Gurdegnass Gurde	Cuth River Ranger Station Cuttis Greek Deer Springs Dry Springs Dry Springs Dry Springs Dry Springs Dry Springs Dry Springs Fronklin Bassin Gorden City Summit Heal Canyon Herd Hollow Herd Hollow Herd Hollow Lither Springs Lither Springs Lithe Bassin (Jower)	Mt. L Oxfor Paradi Slug d Steep Steep Strowk Strowk Trigor Willow	Ben Lamond Peack Ben Lamond (lover) Ben Lamond Trail Causey Dom Cutler Creek Dry Beard Pond Middler 1: Peack Middler Fork Ogden Sagebrush Fat Benery Creek Benery Creek Benery Creek Benery Creek Benery Creek P. R.	Chalk Creek #1 Chalk Creek #2 Chalk Creek #2 Chalk Creek #2 Chalk Creek #2 Chalk Creek #2 Hoddoo Knall Horse Ridge Kilfore Creek Lost Creek Lost Creek Perk City Smt. Perk City Smt.	Readen Mine (lower) Readen Mine (lower) Sergeent Lakes Single Mill Fall Smith & Morehouse PROVO RIVER & UTAI Comp Altomont Clear Creek Ridge #1 Clear Creek Ridge #2 Clear Creek Ridge #3 Congraone R. S. Souph Fork R. S. Souph Fork R. S. Souph Fork R. S. Souph Fork R. S. Sirowberny Divide	E E E E
	ASIN	}⊃≳⊃⊃≥≥≥≥ ⊃⊃-⊃⊃				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	AT B.	111 11 11 11 11 11 11 11 11 11 11 11 11	1012 11339 11339 1014 1014 106 1108 1108 1114 1116 1116 1116 1116 1116 1116	55 25 27 28 33M 41 4P 4P	11486* 11436 11436 11436 11436 11456 11456 11158	1111 1122MP 1113MP 11144P 11143P 11143P 11143P 11143P 11131P 11131P	126 1139 1140 1140 1123 1123 1123 1136 1136 1136 1136	5 d. de
	FO.	10011 10057 101369 101369 101379 101359 10177 10177 11137 11137 11137 11131	222 222 222 222 222 222 222 222 222 22					300

Agencies Cooperating in Utah Snow Surveys

U.S. GOVERNMENT AGENCIES

- U.S. Department of Agriculture Soil Conservation Service Forest Service
- U.S. Department of Commerce NOAA, National Weather Service
- U.S. Department of Interior
 Bureau of Reclamation
 Geological Survey
 National Park Service

STATE AGENCIES

Utah State University
Utah Fish and Game Department
Utah State Department of Natural
Resources, Division of Water Rights
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner

MUNICIPALITIES

Manti Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

PRIVATE AGENCIES

Kaiser Steel Corporation

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FEDERAL BLDG., - ROOM 4012

SALT LAKE CITY, UTAH 84138 125 SOUTH STATE ST.

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID U: S. DEPARTMENT OF AGRICULTURE AGR-101



FIRST CLASS MA

THE PARTY OF THE STR LIBRAIL CURNEM SERIAL

FEDERAL - STATE - PRIVATE

COOPERATIVE SNOW SURVEYS

domestic and municipal water supply, hydro-electric power water supply for irrigation, necessary for forecasting generation, navigation, Furnishes the basic data mining and industry "The Conservation of Water begins with the Snow Survey"